

Notice of Allowability**Application No.**

10/789,140

Examiner

ANDREY BELOUSOV

Applicant(s)

OLANDER ET AL.

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/10/2009.
2. ☒ The allowed claim(s) is/are 17-21, 23-24, 27-35, 37-38, 41-49, 51-52, 55-62, 64-65, 68-70.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date See Continuation Sheet
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 7/31/2009.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Steven P Sax/
Primary Examiner, Art Unit 2174

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 5/11/2009, 6/16/2009, 6/29/2009.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph P. O'Malley on 7/29/2009.

17. (Currently Amended) A method for building a representation of a graphical user interface (GUI), comprising:

generating a representation of the GUI from metadata, wherein the representation includes at least one control, wherein the at least one control has an interchangeable persistence mechanism;

driving the representation through at least one lifecycle stage by an interchangeable lifecycle component;

wherein the metadata can include at least one of: hierarchical relationships among controls, control properties, and control event information;

wherein the representation can be driven through the at least one lifecycle stage by an interchangeable lifecycle component;

wherein an interface is provided to isolate details of the interchangeable lifecycle component from a control container to allow different lifecycle implementations to be interchangeable, the interchangeable lifecycle component further drives a control tree

through different lifecycle stages, the control tree includes portal controls, desktop controls, page controls and portlet controls;

wherein the at least one control can advance through the at least one lifecycle stage in parallel with another control;

wherein the interchangeable life cycle component runs on at least one processor;
and

wherein the life cycle stages include an "Init" stage that allows a control to perform initialization, a "Load State" stage that loads previously saved state from a request, a "Create Child Controls" stage that creates any child controls, a "Load" stage that obtains any external resources necessary for processing the request, a "Raise Events" stage that is a two phase stage where controls first indicate they want to raise events and then all controls who indicated this are allowed to raise events, a "Pre-render" stage that is the final stage before the rendering stages, a "Save State" stage in which all controls that want to save their states are given the opportunity to do so, a "Render" stage that is the stage where controls create their GUI representations and control how any children are rendered, a "Unload" stage that allows the control to free resources, and "Dispose" stage that does any final cleanup.

22. (Cancelled)

25. (Cancelled)

30. (Currently Amended): A system for building a representation of a graphical user interface (GUI), comprising:

a first component operable to produce a second component and a metadata representation of the GUI;

the second component operable to produce a hierarchical representation of the GUI based on the metadata, wherein the representation includes at least one control, wherein the at least one control has an interchangeable persistence mechanism;

wherein the metadata can include at least one of: hierarchical relationships among controls, control properties, and control event information;

wherein the representation can be driven through at least one lifecycle stage by an interchangeable lifecycle component;

wherein an interface is provided to isolate details of the interchangeable lifecycle component from a control container to allow different lifecycle implementations to be interchangeable;

wherein the interchangeable lifecycle component further drives a control tree through different lifecycle stages, the control tree includes portal controls, desktop controls, page controls and portlet controls;

wherein the at least one control can advance through the at least one lifecycle stage in parallel with another control;

wherein the interchangeable life cycle component runs on at least one processor;
and

wherein the life cycle stages include an "Init" stage that allows a control to perform initialization, a "Load State" stage that loads previously saved state from a request, a "Create Child Controls" stage that creates any child controls, a "Load" stage that obtains any external resources necessary for processing the request, a "Raise Events" stage that is a two phase stage where controls first indicate they want to raise events and then all controls who indicated this are allowed to raise events, a "Pre-render" stage that is the final stage before the rendering stages, a "Save State" stage in which all controls that want to save their states are given the opportunity to do so, a "Render" stage that is the stage where controls create their GUI representations and control how any children are rendered, a "Unload" stage that allows the control to free resources, and "Dispose" stage that does any final cleanup.

Claim 36. (Cancelled)

Claim 39. (Cancelled)

44. (Currently Amended): A system comprising:

a means for generating a first representation of a graphical user interface (GUI);
a means for generating a second representation of the GUI from the first representation,
wherein the second representation includes at least one control, wherein the at least one control has an interchangeable persistence mechanism;

wherein metadata can include at least one of hierarchical relationships among controls, control properties, and control event information;

wherein the second representation can be driven through at least one lifecycle stage by an interchangeable lifecycle component;

wherein an interface is provided to isolate details of the interchangeable lifecycle component from a control container to allow different lifecycle implementations to be interchangeable;

wherein the interchangeable lifecycle component further drives a control tree through different lifecycle stages, the control tree includes portal controls, desktop controls, page controls and portlet controls;

wherein the at least one control can advance through the at least one lifecycle stage in parallel with another control;

wherein the interchangeable life cycle component runs on at least one processor;
and

wherein the life cycle stages include an "Init" stage that allows a control to perform initialization, a "Load State" stage that loads previously saved state from a request, a "Create Child Controls" stage that creates any child controls, a "Load" stage that obtains any external resources necessary for processing the request, a "Raise Events" stage that is a two phase stage where controls first indicate they want to raise events and then all controls who indicated this are allowed to raise events, a "Pre-render" stage that is the final stage before the rendering stages, a "Save State" stage in which all controls that want to save their states are given the opportunity to do so, a

"Render" stage that is the stage where controls create their GUI representations and control how any children are rendered, a "Unload" stage that allows the control to free resources, and "Dispose" stage that does any final cleanup.

Claim 50. (Cancelled)

Claim 53. (Cancelled)

58. (Currently Amended): A machine readable storage medium having instructions stored thereon that when executed by a processor cause a system to:

generate a representation of a graphical user interface (GUI) from metadata, wherein the representation includes at least one control, wherein the at least one control has an interchangeable persistence mechanism;

drive the representation through at least one lifecycle stage by an interchangeable lifecycle component;

wherein the metadata can include at least one of: hierarchical relationships among controls, control properties, and control event information;

wherein the representation can be driven through the at least one lifecycle stage by the interchangeable lifecycle component;

wherein an interface is provided to isolate details of the interchangeable lifecycle component from a control container to allow different lifecycle implementations to be interchangeable;

wherein the interchangeable lifecycle component further drives a control tree through different lifecycle stages, the control tree includes portal controls, desktop controls, page controls and portlet controls;

wherein the at least one control can advance through the at least one lifecycle stage in parallel with another control;

wherein the interchangeable life cycle component runs on at least one processor;
and

wherein the life cycle stages include an "Init" stage that allows a control to perform initialization, a "Load State" stage that loads previously saved state from a request, a "Create Child Controls" stage that creates any child controls, a "Load" stage that obtains any external resources necessary for processing the request, a "Raise Events" stage that is a two phase stage where controls first indicate they want to raise events and then all controls who indicated this are allowed to raise events, a "Pre-render" stage that is the final stage before the rendering stages, a "Save State" stage in which all controls that want to save their states are given the opportunity to do so, a "Render" stage that is the stage where controls create their GUI representations and control how any children are rendered, a "Unload" stage that allows the control to free resources, and "Dispose" stage that does any final cleanup.

Claim 63. (Cancelled)

Claim 66. (Cancelled)

Claim 72-82. (Cancelled)

Reasons for Allowance

1. Amendment to include the limitations from the cancelled claims 22 and 25 into Independent claims of 17, 30, 44, and 58 specifies a method, systems, and machine readable storage medium, which now further require:

a. *wherein the at least one control has an interchangeable persistence mechanism, and*

b. *wherein the at least one control can advance through the at least one lifecycle stage in parallel with another control;*

2. The amendment of independent claims 17 (method), 40 (system), 44 (system), and 58 (machine readable storage medium) to include the above recited limitations, along with the features already present in the claim, in particular:

wherein the life cycle stages include an "Init" stage that allows a control to perform initialization, a "Load State" stage that loads previously saved state from a request, a "Create Child Controls" stage that creates any child controls, a "Load" stage that obtains any external resources necessary for processing the request, a "Raise Events" stage that is a two phase stage where controls first indicate they want to raise events and then all controls who indicated this are allowed to raise events, a "Pre-render" stage that is the final stage before the

rendering stages, a "Save State" stage in which all controls that want to save their states are given the opportunity to do so, a "Render" stage that is the stage where controls create their GUI representations and control how any children are rendered, a "Unload" stage that allows the control to free resources, and "Dispose" stage that does any final cleanup

3. The combined features overcome the cited references of Hunter and Fletcher, and is not found in the art. Accordingly, each of the dependent claims are allowable by virtue of their dependency upon independent claims 17, 40, 44, and 58.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Belousov whose telephone number is (571) 270-1695. The examiner can normally be reached on Mon-Fri (alternate Fri off) EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P Sax/

Primary Examiner, Art Unit 2174

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July 31, 2008